## Alan Jay Schwartz, M.D., M.S.Ed., Editor

**Quick Draw Anatomy for Anaesthetists.** By Joanna Oram Fox, M.B.B.Ch., F.R.C.A. Banbury, United Kingdom, Scion Publishing Limited, 2018. Pages: 94. Price: £18.21.

This is not your everyday scientific textbook, so this won't be your everyday book review. Joanna Oram Fox, M.B.B.Ch., F.R.C.A. (Fellow of the Royal College of Anaesthetists), is a Specialist Trainee in Anaesthesia at University Hospital of Wales in Cardiff, Wales. Dr. Fox graduated from Cardiff University in 2007, worked for 4 yr as a general doctor, began anesthetic training in 2011, and will complete her training in 2018. This book grew out of her own use of anatomic drawings to help memorize and then teach difficult anatomic concepts. She says, "drawing simplified diagrams helped us to label any anatomy image shown to us, and so it might help others too." The main idea of the book is to make anatomy simpler to learn, and the target audience is those training in anesthesia and preparing for the Fellow of the Royal College of Anaesthetists examinations.

The text is divided in to seven sections: head, neck, and neuroanatomy; vertebral column; cardiac; airway and respiratory; abdomen; limb—upper; and limb—lower. Step-by-step

instructions for building each anatomic diagram are given to help the learner draw each one in a standardized way using color coding: green for nerves, blue for veins, red for arteries, and black for structures. There is nothing I enjoy more than finding new and unique ways to illustrate complex topics. I've illustrated medical textbooks and journal covers, created infographics and visual abstracts. I guess that's why I was asked to review a coloring book of sorts. But how do I figure out just how useful this text might be for anesthesiologists, particularly trainees outside of the United Kingdom?

Well, how about asking some talented trainees here in the United States. I invited a dozen anesthesiology residents from my own training program over for dinner and asked them to help with this review. The book and some instructions were in the center of the dinner table, and the table was covered with some drawing paper. Everyone gave it a go during the evening, and you can see the results for yourself (fig. 1). Some of the residents' comments (you can see them all if you look carefully):

"Simplifies surgical anatomy in a unique step-by-step approach"

"A great resource for both visual and verbal learners"

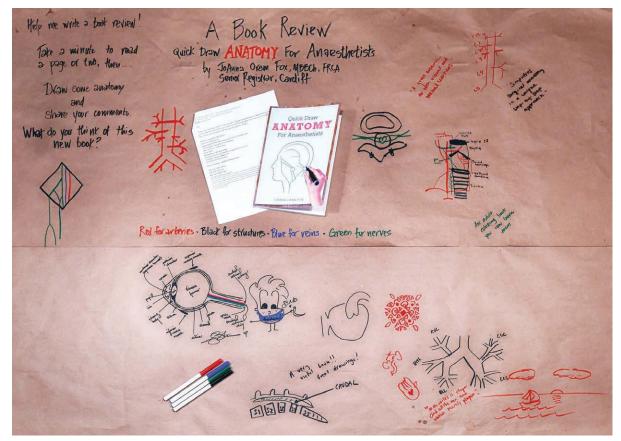


Fig. 1. Drawings and comments from anesthesiology residents currently training at Brigham and Women's Hospital, Boston, Massachusetts.

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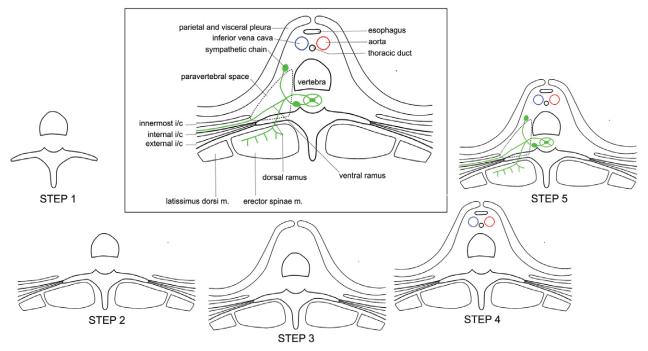


Fig. 2. Drawing the anatomy of the paravertebral space, redrawn by the author using the step-by-step instructions in *Quick Draw Anatomy for Anaesthetists*.

Dr. Fox has created a simplified and readily accessible group of anatomic drawings that quickly allow those studying to master the material. The diagrams are less anatomic drawings and more accurately called visual pneumonics—visual memory aides—simplified, standardized schematic drawings that provide a way for the student creating each drawing to recall the complex anatomy in an easy-to-remember and accurate way. The clear winner of our own book review and drawing session was able to quickly and neatly reproduce the anatomy of the eye (fig. 1).

I also thought I'd see for myself just how useful this approach to systematically building a few anatomic diagrams would be in the learning process. The anatomy of the paravertebral space is simple, but confusing, so I put on my illustrator's hat and tried my hand. The five-step process of drawing the anatomy that defines the paravertebral space starts with the vertebra, adds the paravertebral and intercostal muscles, follows with the esophagus, thoracic duct, and great vessels, continues with the positioning the neural elements, and finally finishes with delineating the limits of the paravertebral space (fig. 2). If you take the time to work through each element of these diagrams, the resulting

anatomy will be firmly engraved in your memory. A terrific learning aid.

How useful is this little book? The anatomy that is illustrated covers an enormous range, from the Circle of Willis, to the larynx, to the brachial plexus in 40 different drawings, each built step by step. The specific content is geared toward those preparing for the Fellow of the Royal College of Anaesthetists examinations, but much of the anatomy will be of use to others training and working in the field of anesthesia. The concept itself of using visual pneumonics is useful to all. For visual learners, the concept just can't be beat. Dr. Fox, congratulations on completing your training and thank you for creating and publishing this simple little book that will help those with a bent toward the visual to learn more quickly and effectively.

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